fragment specifically binds to a component of the double-stranded RNA/DNA hybrid; and

- d) means for detecting the hybrid formed by hybridization of the probe and the target nucleic acid sequence.
- 42. (amended) A non-radioactive hybridization assay for the detection of a target human papilloma virus (HPV) nucleic acid sequence in a biological sample suspected of containing the virus, comprising the steps of:
  - a) hybridizing the target HPV nucleic acid to a complementary nucleic acid probe to form a double-stranded RNA:DNA hybrid;
  - b) capturing the hybrid onto a solid phase to which an anti-hybrid antibody or functional anti-hybrid antibody fragment has been immobilized, wherein the antibody or antibody fragment specifically binds to a component of the double-stranded RNA:DNA hybrid forming a bound hybrid;
  - c) eliminating any non-hybridized probe; and
- d) binding an antibody reactive with a RNA:DNA hybrid to the bound hybrid forming an antibody bound hybrid, thereby detecting the viral nucleic acid sequence.
- 43. (amended) The assay according to claim 42, wherein the probe comprises a nucleic acid complementary to at least a portion of HPV 6 and HPV 11.
- 44. (amended) The assay according to claim 42, wherein the probe comprises a nucleic acid complementary to at least a portion of HPV 16, HPV 18, HPV 31, HPV 33 and HPV 35.